

WHAT IS CLAIMED IS:

1. Apparatus for treating the surface of a floor, said apparatus comprising:

a wheeled vehicle having a generally central vertical longitudinal plane;

5 a lift unit mounted on the wheeled vehicle and capable of up and down movement in said central vertical longitudinal plane of the vehicle;

10 a floor surface treating unit carried by the lift unit generally underneath the lift unit, said floor surface treating unit having an elongate head; said head having a pivotal connection with the lift unit for rotation of said head on a generally vertical pivot axis in said plane and generally at the center of length of the head for rotation of said head on said axis to different angular positions with respect to said plane; and

a locking mechanism associated with the lift unit and the floor surface treating unit for releasably locking said head in a selected angular position.

2. Apparatus as set forth in claim 1 wherein the pivotal connection comprises a pivot assembly extending up through a pivot opening generally at the center of length of the head and through an opening in the lift unit aligned coaxially with the pivot opening, the pivot assembly being secured to 5 the lift unit against movement outward of the pivot opening and the lift unit opening to thereby connect the head to the lift unit, the pivot assembly having a support member for supporting the floor surface treating unit upon upward movement of the lift unit.

3. Apparatus as set forth in claim 2 wherein the head is removably connected to the lift unit by the pivot assembly.

4. Apparatus as set forth in claim 2 wherein the pivot assembly comprises a pivot bushing disposed in at least one of said pivot opening of

the head and said lift unit opening to facilitate rotation of said head relative to the lift unit about the pivot axis of the head.

5. Apparatus as set forth in claim 4 wherein the pivot bushing has a flange extending radially outward therefrom and defining said support member of the pivot assembly, the flange being sized larger than the lift unit opening whereby the lift unit engages said flange upon movement of the lift unit upward such that the flange substantially supports the floor surface treating unit upon upward movement of the lift unit.

6. Apparatus as set forth in claim 5 wherein the pivot bushing is generally tubular and has a central passage, the pivot assembly further comprising a pivot pin extending up through the pivot opening of the head, the lift unit opening and the central passage of the pivot bushing, and a retaining member for removably retaining the pivot pin against movement outward of the pivot opening, the lift unit opening and the central passage of the pivot bushing to thereby removably connect the floor surface treating unit to the lift unit.

7. Apparatus as set forth in claim 2 wherein the pivotal connection further comprises at least one slide assembly extending up through a corresponding opening in the head in radially spaced relationship with the central pivot opening of the head, the at least one slide assembly further extending up through a guide slot formed in the lift unit in radially spaced relationship with the lift unit opening and positioned relative to the opening in the head such that the opening in the head is in registry with the slot generally throughout rotation of the head relative to the lift unit about the pivot axis of the head, the at least one slide assembly being secured to the lift unit against movement outward of the opening in the head and the guide slot of the lift unit to thereby further connect the head to the lift unit, the at least one

slide assembly having a support member for further supporting the floor surface treating unit upon upward movement of the lift unit.

8. Apparatus as set forth in claim 7 wherein said at least one slide assembly comprises a bushing disposed in said corresponding opening in the head and said guide slot of the lift unit to facilitate rotation of said head relative to the lift unit about the pivot axis of the head.

5 9. Apparatus as set forth in claim 8 wherein the bushing has a flange extending radially outward therefrom and defining said support member of said at least one slide assembly, the flange being sized larger than the guide slot of the lift unit whereby the lift unit engages said flange upon movement of the lift unit upward such that the flange substantially further supports the floor surface treating unit upon upward movement of the lift unit.

5 10. Apparatus as set forth in claim 9 wherein the bushing is generally tubular and has a central passage, the slide assembly further comprising a pin extending up through the corresponding opening in the head, the guide slot of lift unit and the central passage of the bushing, and a retaining member for removably retaining the pin against movement outward of the corresponding head opening, the lift unit guide slot and the central passage of the bushing to thereby further removably connect the floor surface treating unit to the lift unit.

5 11. Apparatus as set forth in claim 1 wherein the lift unit has an opening therein spaced radially from the pivot axis of the head, said head having openings spaced radially from the pivot axis of the head and corresponding respectively to different angular positions of the head relative to the central longitudinal vertical plane of the wheeled vehicle, the openings in the head being positioned relative to the lift unit opening for selective

registry therewith upon rotation of the head relative to the lift unit about the pivot axis of the head to a selected angular position, the locking mechanism comprising a pin movable between an unlocked position and a locked
10 position, said pin being receivable in the lift unit opening and the opening in the head corresponding to the selected angular position of the head in the locked position of the pin to releasably lock the head in the selected angular position.

12. Apparatus as set forth in claim 11 wherein the locking mechanism further comprises a biasing member for biasing the pin toward its locked position.

13. Apparatus as set forth in claim 1 wherein said wheeled vehicle is a floor scrubber comprising a wheeled chassis and a housing supported by the chassis, the floor surface treating unit being connected to the chassis by the lift unit, the head of the floor surface treating unit being an elongate head,
5 said floor surface treating unit further comprising a pair of brushes supported by the head in spaced relationship with each and in radially spaced relationship with the pivot axis of the head, and pair of motors respectively drivingly connected to a corresponding one of the brushes to drive said brushes.